DOCUMENT RESUME

ED 088 222 EA 005 956

AUTHOR	Cerrito, August E.
TITLE	Program Budgeting for School Districts. Supplement to Handbook 3 Budgeting.
INSTITUTION	New York State Education Dept., Albany. Div. of Educational Management Services.
PUB DATE	73
NOTE	67p.; A related document is ED 065 922
EDRS PRICE	MF-$0.75 HC-$3.15
DESCRIPTORS	*Administrator Guides; Boards of Education; Budgeting; Budgets; *Cost Effectiveness; Decision Making; Educational Finance; Expenditures; Guidelines; *Models; Money Management; *Program Budgeting; Program Costs; *Resource Allocations; School Funds; Systems Approach
IDENTIFIERS	*Planning Programming Budgeting Systems; PPBS

ABSTRACT

The purpose of this handbook is to help clarify some of the procedural aspects leading to implementation of a program budgeting system and thereby assist those boards of education and administrators contemplating installation of program budgeting and, ultimately, a comprehensive program, planning, budgeting, system within their districts. The publication begins by considering the history, background, and purpose of program budgeting. A 2-phase model to implement program budgeting is then developed. Phase I is basically a program costing mechanism that generates cost data for identified educational programs. The program structure is arranged by locations (building units), programs (grade level), and sub-programs (subject area within grade level). Phase II includes rudimentary planning, programing, and evaluation components within the budgeting cycle. Ten illustrative data forms to be used in program budgeting are included. A selected bibliography on program budgeting is included. (Author/DN)

ED 088222

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

PROGRAM BUDGETING FOR SCHOOL DISTRICTS

SUPPLEMENT TO HANDBOOK 3 BUDGETING

The University of the State of New York
The State Education Department
Division of Educational Management Services
Albany, New York 12210
1973

EA 005 956

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of the University (with years when terms expire)

1984	Joseph W. McGovern, A.B.,J.D.,L.H.D.,LL.D. D.C.L., Chancellor	New York
1985	Everett J. Penny, B.C.S.,D.C.S., Vice Chancellor	White Plains
1978	Alexander J. Allan, Jr., LL.D.,Litt.D.	Troy
1987	Carl H. Pforzheimer, Jr., A.B.,M.B.A.,D.C.S.,H.H.D.	Purchase
1975	Edward M.M. Warburg, B.S.,L.H.D.	New York
1977	Joseph T. King, LL.B.	Queens
1974	Joseph C. Indelicato, M.D.	Brooklyn
1976	Mrs. Helen B. Power, A.B.,Litt.D.,L.H.D.,LL.D.	Rochester
1979	Francis W. McGinley, B.S.,J.D.,LL.D.	Glens Falls
1986	Kenneth B. Clark, A.B.,M.S.,Ph.D.,LL.D.,L.H.D.,D.Sc.	Hastings on Hudson
1983	Harold E. Newcomb, B.A.	Owego
1981	Theodore M. Black, A.B.,Litt.D.	Sands Point
1988	Willard A. Genrich, LL.B.,L.H.D.	Buffalo
1982	Emlyn I. Griffith, A.B.,J.D.	Rome

President of the University and Commissioner of Education
Ewald B. Nyquist

Executive Deputy Commissioner of Education
Gordon M. Ambach

Deputy Commissioner for Elementary, Secondary and Continuing Education
Thomas D. Sheldon

Associate Commissioner for Educational Finance and Management Services
Stanley L. Raub

Assistant Commissioner for Educational Finance and Management Services
John W. Polley

Director, Division of Educational Management Services
A. Buell Arnold

Chief, Bureau of General Educational Management Services
Robert E. Wilson

FOREWORD

The continually rising cost of public school education has caused many boards and school administrators to seek alternatives to traditional methods of budget development. These educators contend that allocating scarce resources to expanding needs cannot be accomplished within the framework of the line item budget. They further maintain that the line item budget does not adequately portray the educational program carried on by the schools.

The information presented in this pamphlet outlines an alternative method of school budgeting referred to as program budgeting. Program budgeting allows the school district to identify its programs and to allocate resources to each of them on the basis of established priority.

In view of the wide latitude of expertise and availability of resources within the various school districts, the model described herein has been illustrated in a two-phase approach. Phase I is basically a program costing mechanism, while Phase II carries this concept forward with the inclusion of rudimentary planning, programming, and evaluation components within the budgeting cycle. A graduated application such as this should assist school districts contemplating implementation to achieve their objectives at a pace and degree commensurate with local need and capability.

Since program budgeting is a component of the overarching planning, programming, and budgeting systems, acceptance of the model described would not preclude school districts from achieving ultimately the comprehensive installation of a full PPBS.

It should be expressly mentioned that what follows is not mandated but will serve as a guide to those districts seeking alternatives to their present budgeting procedures.

"Program Budgeting for School Districts" was prepared by August E. Cerrito, Supervisor, Division of Educational Management Services, with suggestions from co-workers and colleagues in the school districts of the State.

Stanley L. Raub

Stanley L. Raub
Associate Commissioner for Educational
Finance and Management Services

TABLE OF CONTENTS

FOREWORD		iii
HISTORY		1
BACKGROUND		1
PURPOSE		4
PROCEDURES LEADING TO IMPLEMENTATION		4
PHASE I		7
SUMMARY PHASE I		17
PHASE II		18
SUMMARY PHASE II		29
ILLUSTRATIVE DATA FORMS		32
Figure 1	Typical Program Structure Based on Location	32
Figure 2	Optional Coding System	33
Figure 3	Allocation of Instructional Time to Sub-Programs (Subject Area)	34
Figure 4	Allocation of Salaries to Sub-Program (Subject Area)	35
Figure 5	Allocation of Instructional Appropriations to Location by Grade Level	47
Figure 6	Allocation of Fringe Benefits to Location by Grade Level	53
Figure 7	Sample Program Cost Allocation Based on Phase I Implementation	54
Figure 8	Time Line of Activities Required to Complete a Program Budget Cycle	57
Figure 9	Program Request	58
Figure 10	Illustration of a Structure for Program Coding	60
APPENDIX A	Selected Bibliography	61

PROGRAM BUDGETING FOR SCHOOL DISTRICTS

HISTORY

The budget, although primarily a financial instrument, clearly mirrors some of the problems which confront educational institutions today. Many of the difficulties brought to light through the medium of this document have had their genesis in prior times and for reasons that were not initially financial in nature.

Increasing societal pressures have resulted in vastly greater demands being made on the schools of our nation and, in consequence, have caused a significant increase of new educational programs and a redirection of existing ones to meet the expressed need. Escalating salaries, fringe benefits, and inflation have contributed further to the economic plight most schools find themselves in today.

Since the budget is a tangible expression of the effect these influences have on education, it has been subjected to extraordinary scrutiny in recent times by those who believe increased cost effectiveness can be achieved through improved budgeting procedures.

BACKGROUND

A growing number of educators and community members have expressed misgivings about the traditional line item budget as a vehicle which can portray adequately the educational program being carried on by the schools. They have pointed out that taxpayers in some instances voted down school budgets, not because of budgetary increases per se, but rather that the need for increases was not fully substantiated.

Of equal concern and directly related to the above problem is the difficulty boards and their administrators face in allocating scarce resources among the various educational programs in as equitable a manner as possible.

Systems management or what is more commonly referred to as PPBS (Planning-Programming-Budgeting Systems) has been attracting a growing number of those who are dissatisfied with traditional concepts as the management philosophy which will meet the test of greater efficiency for school operations.

PPBS made its first recognizable impact on the governmental scene in the middle 1960's when the then president, Lyndon B. Johnson, directed federal agencies to adopt this approach to budgeting. Its growing influence on school management can be traced from that point in time.

PPBS in its essential form systematizes the various processes of operation such as planning, programming, budgeting, and evaluation, resulting ultimately in a more valid allocation of resources among the various alternatives selected to achieve the goals and objectives of the organization. It is also characterized by a multi-year approach to operational planning and budgeting.

It is understandable then that a system of management, which purports to accomplish what PPBS does, would be attractive to many school board members and administrators facing the daily confrontation of deciding how resources, both financial and human, will be apportioned to fulfill the educational mission. However, actual implementation of full systems management has not been without its share of complexities, resulting in some budgetary technologists to conclude that although the inherent and

ultimate value of systems management cannot be denied, full implementation at the present time and under present conditions is difficult to achieve.

Hartley succinctly supports this premise in an article appearing in Educational Technology (April 1972, p. 19) when he said:

> "Trying to apply PPBS to the earthy reality of local schools is a bit like trying to change a flat tire on a moving car. While faced with serious day-to-day problems of collective negotiations, drugs, racism, vandalism, and budget rejection, location administrators often are unable to devote the time, effort, or resources to a full scale PPBS installation. The result is that schools in 1972 are well advised to become much more opportunistic; that is they should adopt only those aspects from a complete PPBS that will bring maximum benefits to their districts in a minimum of time."

Others involved in the budgeting process have reached similar conclusions, albeit from somewhat differing premises ranging from those who are concerned with the possible dysfunctional effects a full installation of a PPBS may have on staff morale to those who feel that PPBS cannot accommodate itself to the political considerations of an organization.

What then are the acceptable alternatives to full implementation of PPBS as an initial step? Many of those who maintain that PPBS cannot be readily implemented within present considerations, indicate that the more simplified application of program budgeting (PB) is achievable. The optional simplicity of a PB installation allows for a greater degree of flexibility needed for it to be accommodative to current constraints.

Beyond this, PB is a compatible transitional process leading to a comprehensive PPBS and can be initiated within the framework of traditional budgeting concepts.

Since program budgeting is a component of the overarching PPBS, it can yield many of the managerial benefits of the latter without having to develop a comprehensive and time-consuming explication of goals and objectives unless desired. Evaluative procedures can be as extensive or uncomplicated as the requirements and the capability of the district initially dictate. Program budgeting can become operational within one or two years as contrasted with the five or more years required to effect a rudimentary application of full systems management (PPBS).

PURPOSE

The purpose of this handbook is to help clarify some of the procedural aspects leading to implementation of a program budgeting system and thereby assist those boards of education and administrators contemplating installation of PB and, ultimately, a comprehensive PPBS within their districts.

PROCEDURES LEADING TO IMPLEMENTATION

A decision by the board of education to implement a program budget is not a minor one since many of the processes involved in data collection vary significantly with those employed within traditional concepts. The PB process will also determine how the budget document is formulated, its presentation to the public, and its use as a management instrument.

Before making a firm commitment to implement program budgeting, the board and administration should make a careful analysis of systems management in respect to the objectives to be served and the basic reasons for embarking on such a course.

A necessary first step in this process would be for the board to direct its chief school officer and his key administrators to review the literature on the subject.

School districts contemplating implementation of a PB may find many informative publications which extensively describe the mechanics and value of the essential components of a systems approach to management. Reference to these publications should help determine the degree and direction to be taken in implementation. A selected bibliography may be found in Appendix A.

Following an in-depth review of such information, a report should be presented to the board which would identify both positive and negative aspects of the process and unique considerations of the district which must be addressed.

Many questions should be posed prior to implementation, some of which are:

1. Does the district employ the management by objectives approach? If the answer is no, but there are some objectives which have been formalized, can these be integrated within the proposed budgeting process?
2. Is the decision to implement a PB an attempt to be fashionable? Is the district implementing PB to satisfy external pressures only?
3. Will the PB be used as a management tool? Will it be translated into an accounting format and used as a guide in the expenditure of funds and the maintenance of programs?

The reasons motivating board decision to implement or not will vary from district to district and their validity must be assessed locally. What is important, however, is that each board should clarify and acknowledge its intentions prior to initiating a restructuring of its budgetary process into a program format.

If, following these considerations, the decision is made to proceed with implementation, it should first be ascertained how extensive the initial effort will be.

The application of a program budget approach to existing concepts may be a rudimentary one which is more aptly termed a program costing mechanism designed to identify attributable costs of existing programs or it may be a more sophisticated one employing planning, programming, and evaluative dimensions to a degree commensurate with the district's capability.

In the latter approach, some school districts have applied PB techniques to only one program as an initial effort. As expertise with the process increases, the other educational programs may be included in the cycle, culminating in a PB which incorporates all of the identified programs offered by the district.

The agreement in principle by the board of education and its administrative staff to develop a program budget should be translated into specific resolutions and written directives from the board to its chief school officer. The board resolution may be in the form of policy statements incorporating its objectives. The board should acknowledge that increased effort and time must be expended by administrative staff to achieve the completion of the PB cycle. The policy resolution should also recognize that additional effort and time will not only be required

of administration but that greater involvement by general staff, students, and community is essential to assure success in the venture.

The emphasis will now move from an expenditure versus an income basis to a comprehensive look at current programs and new ones which may come before the board for consideration.

Increased involvement by others than the board and administration in the budgetary process, although not a new phenomenon, will require a more candid approach to budgeting in order to be responsive to the questions of those who may be relatively unaware of school district operations and costs associated with the various programs.

This handbook will show a two-phase approach to implementation. The first phase will illustrate an unsophisticated initial application and the second will develop this approach into a relatively more comprehensive process. This portrayal does not imply that a school district should follow the model suggested but rather will serve as a guide to those contemplating implementation. Beyond this, it should be mentioned that the major emphasis of the handbook will be on the budgeting-accounting systems supportive of both phases rather than on the purely educational aspects of the planning-programming, and evaluative components found in Phase II.

PHASE I

The following illustration is, as stated above, more appropriately termed identification of program cost or program costing. There are three basic assumptions in this simple application: (1) that educational programs offered by the school district will be identified, (2) that alternatives within programs will not be considered in budget development, and (3) that evaluative procedures will be those presently in effect.

The following steps will lead to such a budget:

1. Identify existing programs.
2. Develop the program budget.
3. Present the program budget (internal).
4. Present the program budget as a popular budget to the district voters.
5. Recast the program budget into function and object form for reporting purposes (the function and object* budget may also be included in the popular budget).

*The terms function and object refer to the classification of accounts found in The Uniform System of Accounts for School Districts, published by the Division of Municipal Affairs, Department of Audit and Control, Albany, New York.

"Function: The term function has reference to the primary classification and description of appropriation expenses as to purpose. It identifies groups of services aimed at accomplishing certain purposes or ends. For example, General Support identifies the legislative, executive, financial and other general support activities.

"Each function is composed of a group of related units. For example, the function of instruction is subdivided into the various functional units of Supervision, Teaching, Interscholastic Athletics, etc."

"Object: The term object has reference to the secondary classification and description of appropriation expenses; it identifies expenses by the article purchased or service obtained in order to carry out a function. The objects of expense are Personal Services, Equipment, Capital Outlay, Contractual Expenses, Principal and Interest on Debt, Employee Benefits, and Interfund Transfers."

STEP 1: Identify all Programs that can be Viewed as being Discrete

Program identification may be determined in several ways, the most prevalent being by subject area, such as mathematics, reading, science, etc., in each grade level and within each location (individual school building).

Such an approach is consistent with current thought that location be the basis for program arrangement in order to allocate resources equitably among school units within a school district.

Other methods may consider programs on the basis of age span such as primary, elementary, middle school, senior high school, or by function such as instruction support service, etc.

STEP 2: Develop the Program Budget

Since this is an initial approach designed primarily to acquaint board and staff with a budgeting-accounting procedure supportive of program budgeting, the determination of program structure should be kept in relatively simple and understandable dimensions. (The illustrated coding structure, however, will not only support program budgeting in its simplest form, but will also maintain a more comprehensive application of PB shown in the Phase II illustration which follows.)

In order to satisfy the need for initial simplicity, a program structure that allocates only instructional items and employees benefits to each of the locations will suffice. It can be readily seen that the allocation of employee benefits to each of the locations is necessary to gain a more accurate picture of total staffing expenditures attributable to the various school units.

Appropriations for support programs such as Board of Education, Central Administration, Finance, Staff, Pupil Transportation, etc., could be assigned to each location. However, such allocations would be arbitrary and, in most instances, not truly indicative of actual operating costs attributable to the educational programs carried on.

Figure 1 illustrates such a program structure.

Once the program structure has been established, a coding system necessary to support its maintenance is required. The following coding structure would enable the school business office to allocate properly to each location:

Function	Object	Program	Sub-Program	Location

Retaining the function object coding found in the Uniform System of Accounts for School Districts, referred to earlier, will provide consistency with present accounting codes and will also allow for easy accumulation of data necessary for state reporting purposes.

To illustrate how this coding structure would operate in a typical district, let us assume that the school district has three elementary schools--A, B and C; one middle school--D; one senior high school--E; and a central administration building--F. Location codes can be assigned to each of these units starting from 01 and ultimately reaching 99. A two-digit system for location identification is adequate for the bulk of the school districts in the state since possibly only a few would exceed 99 units in number.

In the example portrayed, code 01 would be assigned to elementary school A, 02 to B, 03 to C, 04 to the middle school, 05 to the senior high school, and 06 to central administration-support programs. As mentioned above, all support programs other than employee fringe benefits assignable to the various school locations would be allocated to central administration-support programs.

EXAMPLE: An appropriation or encumbrance assigned to elementary school A would appear as:

Function	Object	Program	Sub-Program	Location
				01

Previously it was stated that a relatively common configuration of program structure consisted of identification of subject areas within grade levels by location. Predicated on this assumption, let us assign sub-program code 01 to Reading, 02 to English, 03 to Math, 04 to Social Studies, and so on.

EXAMPLE: An appropriation or encumbrance assigned to elementary school A for the English program would appear as:

Function	Object	Program	Sub-Program	Location
			02	01

Carrying this procedure forward, let us assign coding numbers to program by grade level. As an example, 00 could be assigned to kindergarten, 01 to grade one, and so on.

EXAMPLE: An appropriation or an encumbrance assigned to elementary school A for the English program in grade one would appear as:

Function	Object	Program	Sub-Program	Location
		01	02	01

The completed program coding structure would appear as follows when the proper function and object coding has been applied:

EXAMPLE: An appropriation or an encumbrance assigned to elementary school A for the English program in grade one for teachers' salaries:

Function	Object	Program	Sub-Program	Location
2110	12	01	02	01

For greater clarification, several added examples of how coding may be accomplished within this system are listed below:

EXAMPLE: An appropriation for equipment is made to the middle school for grade seven mathematics:

Function	Object	Program	Sub-Program	Location
2110	2	07	03	04

EXAMPLE: An appropriation is made to the high school for English teachers' salaries in grade 12:

Function	Object	Program	Sub-Program	Location
2110	13	12	02	05

EXAMPLE: An appropriation is made for a principal's secretary in elementary school C and the arbitrary program code assigned to the principal's office is 50:

Function	Object	Program	Sub-Program	Location
2020	16	50	00	03

No provision is made for fund coding in this Phase I presentation since it provides programming for only General Fund transactions. However, if fund coding is desired, it is a simple matter to add a position in the coding structure to accommodate this need. If this is determined to be necessary, A could be assigned to the General Fund, B to the School Lunch Fund, and so on.

EXAMPLE:

Fund	Function	Object	Program	Sub-Program	Location
A	0000	00	00	00	00

The accounting system shown above may be maintained manually. However, since it is fully compatible with the Financial Subsystem developed under the auspices of the New York State Educational Information System (NYSEIS), computer support would become available as the subsystem becomes operational in each regional center.

Figure 2 illustrates how coding may be assigned to the various positions in the total system.

Budgeting procedures which would support the development of the Phase I approach portrayed are essentially those which are referred to as cooperative budgeting in Handbook #3, Budget, published by the Division of Educational Management Services, State Education Department, Albany, New York, 1968 (a review of this section would be beneficial to school districts contemplating implementation of the Phase I illustration).

Cooperative budgeting as contrasted to centralized budgeting places greater responsibility on the individual school building for the accumulation of its budgetary requests, but not complete responsibility as is the case in decentralized budgeting procedures.

In essence, procedures governing the development of a budget supportive of the Phase I PB would require the following steps:

1. A calendar of budgetary events should be established by central administration in conjunction with the various principals and directors. The calendar would indicate when specific considerations of program budget development will take place. It is suggested that these dates or periods of time do not

conflict with but are supportive of budget calendars established to develop traditional budgets, since the first year costing of programs will be primarily one of educating district personnel in its use and should be developed in parallel with the traditional budget. Following this suggestion will eliminate the necessity to recast the prior year function and object budget into a program format as well as develop the current year budget in the same format. This facilitates comparisons within the first year of implementation. Such a course will enable the district to develop a PB format as well as the traditional function object budget in the first year and then make program comparisons between budget years in the second year of implementation. This would materially reduce the business office workload by spreading the task over two years.

2. The principal and designated building staff would develop budgetary requests for their respective units for all applicable objects of expense within the instructional area. A delineation of budgetary responsibilities assigned to the building principal and those to the central office would be decided by joint agreement. In general, the building principal would be responsible for estimating salaries of both professional and nonprofessional staff assigned solely to a building (other than operation and maintenance staff, since this was one of the assumptions made) estimating educational equipment needs, estimating supply and material requirements, and contractual and other expenses within this functional area.

Resource teachers, itinerant teachers, and other supportive staff would be assigned on a percentage of time basis to the various schools, from data supplied to the building principals by the central office.

Operation and maintenance budget estimates generally would be the responsibility of the superintendent of buildings and grounds, or the central office if such a position is nonexistent, but would not be allocated to the building locations since they would be retained under central administration-support programs. However, operation and maintenance allocations could be assigned to each building program if such an assignment was deemed necessary. Open lines of communication between each building (location) and the central office are absolutely essential to obtain the financial data necessary to develop valid allocations.

The completed building budget would be then submitted to the central office for initial review.

3. The central office would review each building budget and add all object items which should be allocated to each building program budget beyond those which are the responsibility of the individual principals. When this task has been completed, a listing of such additions should be submitted to the principals to assist them to complete the tentative building program budget.

Operation and maintenance budgets, transportation budgets, and school lunch budgets would be submitted by the various supervisors or completed by the central office if these positions were not filled. All other budgetary additions would be the

responsibility of the central office and included along with operation and maintenance, transportation, etc., in the central administration-support programs category. The tentative budget resulting from these activities would be reviewed by program (location). Reductions or increases would be submitted to the originating program (location) with instructions to change its records accordingly.

4. The tentative budget would be submitted in program form to the board of education for their initial review. Following this review and evaluation by the board, all reductions and/or increases would be indicated to the originating program (location) for adjustment of individual budgets.

   If the board required a function and object budget as well, it would be a simple procedure to recast the program budget into the function object format. This step would be required in any event for state reporting purposes.

   The completed program budget, as well as the function and object budget, would then be available for presentation in the popular budget distributed to the voters of the district.

The procedural guidelines established above do not presume to be all inclusive, since they cannot address themselves to all of the unique considerations of the various school districts. Beyond this, it must be emphasized once again that what has been illustrated thus far is not program budgeting in a true sense, but rather an identification of existing programs arranged in simple format and costed. The value of the Phase I approach to PB is realized only when it is considered as an educational

experience for boards of education, administrative staffs, and business office staffs, and more importantly as a prelude to a more sophisticated application of planning, programming, and evaluative components within the PB cycle, and ultimately within a full PPBS.

Data gathering forms needed in the process are generally designed to yield the information required to support the degree of implementation. Following this simple axiom will assist the district to generate only necessary data and not have its efforts engulfed in a flood of redundant and/or irrelevant data. Several specimens of suggested data gathering papers are shown in figures 3 to 6. An illustration of how a budget might be presented if the procedures outlined above are followed in figure 7.

Please note that the financial data used in figure 7 are not based on any actual budget and do not imply anything other than various options available for presentation.

SUMMARY PHASE I

In this phase a simple costing mechanism has been outlined which, if implemented, would generate cost data for identified educational programs. The program structure was arranged by locations (building units), programs (grade level), and sub-programs (subject area within grade level).

Allocations to the various locations were delimited to the instructional functions where applicable and fringe benefits assignable to each. All other appropriations were maintained under a supportive program assigned to the central office location.

Program coding to identify the allocation of appropriations and/or expenditures was illustrated as well as various working documents suggested to gather necessary data to complete the program costing cycle.

The main emphasis in the Phase I illustration was to acquaint board and staff with a budgeting-accounting process necessary to support a basic program structure. As stated previously, the assumptions made for this particular application were that educational programs offered by the school district would be identified, alternatives within programs would not be considered, and evaluative procedures would be those currently employed.

The inherent value of this approach would consist primarily of identifying costs attributable to the various identified programs. Beyond this, some rudimentary management decisions may be made in respect to allocation of resources. However, management systematization leading to improved cost effective educational offerings would not necessarily be enhanced within the process of program cost identification. This lack creates a need for a system of educational program management that is fully integrated with the budgeting-accounting process.

PHASE II

A more advanced implementation of program budgeting would require, therefore, the addition of the planning, programming, and evaluative components within the budgeting-accounting process. Their inclusion in the PB cycle would increase management's ability to discern cost effectiveness of identified educational programs.

The degree of implementation of these components within the PB cycle is dependent in great measure on the identified needs of the district as well as the level of expertise of the human resources available. A discussion of planning, programming, and evaluation will be made as they fit in the PB cyclical process.

The Phase II illustration which follows, although more advanced than the model portrayed earlier, is st.. a relatively unsophisticated application of systems management.

Basic assumptions in this second phase are that school district goals will be identified, objectives for identified educational programs established, alternatives for programs developed, and evaluative criteria to assess effectiveness of accepted alternatives determined.

To reiterate, the main emphasis of this handbook is on budgeting-accounting procedures which will support the planning, programming, and evaluative components of a PB cycle, but not determine them.

Essentially, a decision to implement a more advanced PB would require as an initial step the construction of a time-line of activities and responsibilities that would incorporate specific times for their consideration within the cycle of events.

Each activity should dovetail with and support the completion of the total cycle, although several activities may be carried on simultaneously. Careful construction of a time-line will also help clarify the total process and in turn assist in the assignment of responsibility. The calendar of budgetary events established in Phase I could, with possible modification, be integrated into the time-line of activities finally approved. Figure 8 illustrates a rudimentary time-line of activities.

Many of the activities of a program budget are being carried on by well-managed school districts. However, PB components such as planning, programming, budgeting-accounting, and evaluation, both short term and long term, may not be carried on in the systematized fashion dictated by the systems approach. To some, what follows will appear to be a set of

procedures that are not new or unusual; keep in mind, however, that each of the activities in a PB cycle must be interdependent and supportive to obtain improved programs that are cost effective.

The following guidelines should be followed in order to achieve a program budget application that goes beyond mere costing of programs:

(Items marked with an asterisk indicate that these steps could have been taken in the Phase I application.)

*1. Identification of existing programs.

2. Development of budgetary parameters.

3. Projection of enrollment for identified programs.

4. Development of the program budget:

   a. Planning (development of goals and objectives)

   b. Programming and evaluation (development of programs to achieve established goals and objectives)

*5. Presentation of the program budget.

6. Recasting the approved program budget to function and object budget for reporting purposes.

*7. Presenting program budget as popular budget to voters.

A more extensive development of the above guidelines may help clarify each of the activities and also assist in showing how they contribute to the orderly development of a program budget.

1. Assuming that the program identification carried on previously was acceptable, the district could then proceed to item 2, the development of budget guidelines and parameters. If, however, the district in its experience with Phase I decided that an alternative approach to program identification is necessary to meet its unique needs, it may then modify its programming to

suit the expressed need. Usually a representative committee consisting of administrators and teachers is convened for this purpose. Its concern is to identify a program structure that is compatible with the district's philosophy, existing organizational arrangements, interrelationship of subject matter areas, grade groupings, facility arrangements, and other contributing factors.

For our purpose, let us assume that the identified program structure is acceptable and proceed to item 2.

2. A pragmatic approach should basically undergird the process of defining the parameters governing budget development.

We would all appreciate having unlimited human and financial resources at our disposal. However, this is not reality, since we are constrained by many factors, some of which extend beyond the confines of the district.

The resolution of the dilemma is to allow educational staff to develop optimal programs within resources that are available. Making incremental changes in the prior year budget as the sole basis for all program allocations is not an acceptable approach, since this would negate the value of program budgeting. It is highly possible that even the relatively unsophisticated program analysis inherent in the Phase II model will reveal that some programs should be supported with increased resources, while others should be maintained at existing levels, retrenched, or eliminated.

Two basic concerns should be addressed at this time:

a. External and community factors which may have relevancy to the district's operating posture and available resources base.

b. A districtwide priority schedule.

Other internal factors may be identified locally that also have significant impact on the limits agreed upon.

External and community factors which may have an influence, either positive or negative, on budgetary guidelines may vary from district to district. However, some of the more prevalent ones follow:

a. Will state aid increase, decrease, or remain stable in the new budget year?

b. What is the community temperament in relation to increasing property taxes?

c. Will any factors within the community dramatically affect enrollment?

Examples of district priorities which must be assessed in relation to available resources may be:

a. Limiting provisions of negotiated contracts with district professional and nonprofessional personnel.

b. Plant capacity, quality, and arrangement.

c. Staff caliber.

Generally the chief school officer is held responsible for the delineation of budgetary guidelines. In order for him to complete this activity adequately, he should seek input from staff particularly in the area of educational priorities. The school

business office may be of singular assistance in developing estimates of revenues required to support programs. It would also be beneficial in the process to obtain from key community leaders their assessment of local willingness to support the educational program.

3. Allocating resources to the various programs cannot be accomplished with any degree of validity unless the numbers of those to be served are known. This then, is an integral step leading to completion of the cycle.

4. Program development is the core of the total PB process. It is also at this point that the value of PB may be best viewed. It is also at this point that a district may draw on its expertise either to develop a highly sophisticated approach or opt to implement on a lesser, more rudimentary plane. This decision will rest in great measure on an evaluation of the district's recognized needs as well as on the ability and availability of staff to perform the services required.

If a district wishes to implement at a level commensurate with Phase II (skipping the Phase I model), it must recast the function object budget of the current year into the various identified programs. This would be necessary in order to allocate costs and to allow those responsible for program development to make viable decisions when making program requests for the new budget year. The task of recasting usually falls on the business office and can be a time-consuming activity requiring assistance from educational program staff. (The program coding and the data work sheets illustrated in the first phase will also be applicable here.)

Let us assume, however, that this task was completed for the current budget year in the Phase I application and comparisons are available to assist in the program budget development for the ensuing year.

A recapitulation of the steps taken may assist in clarification of the total process thus far:

1. Programs have been identified. This procedure may have been completed in Phase I or a redefinition of program structure was required for a Phase II implementation.
2. Budget limits and guidelines have been established based on the influence of external conditions, community support, district priorities, and internal constraints.
3. Estimated enrollment for each identified program has been completed.
4. The function object budget for the current year has been recast into a program budget format to allow for initial comparisons and to make viable decisions for program requests in the new budget. The recasting may have been accomplished in the Phase I application.

Since budgetary data and guidelines are now established, the next step would be to develop the program budget.

Three basic elements of systems management now come into play and, as stated earlier, may be as comprehensive or simple as the capability and/or needs of the district dictate. They are the planning, programming, and evaluative components.

The planning component is the initial stage in program budget development since it is at this level that goals and objectives should be established for both the school district as a whole and identified programs specifically.

A comprehensive application of systems management would require extensive interplay between community aspirations and educational programs in order to achieve a compatible goal structure between the two. Since this is a time-consuming process, a suggested Phase II alternative would consist of selecting a small but representative committee of community leaders and educational staff to determine several general goals which adequately serve community aspirations and educational direction. This approach would expedite initial implementation.

A more exhaustive articulation between community and school could then be carried on with the pressure for completion lessened. The product of this activity could be superimposed on the PB cycle when fully defined and as the sophistication of implementation increased.

Goals are not restricted by a time frame for completion nor are they quantifiable or measurable other than in a broad spectrum. Objectives on the other hand are more specific and should be measurable within an identified time frame. Objectives should also be supportive of the desired goal structure.

Following the development of a districtwide goal structure, specific objectives supportive of goal achievement should be determined for each of the identified programs.

Programming is the next procedure in this process. When goals have been identified for the district and objectives supportive of goal achievement for the various programs established, it now becomes necessary to develop program structures that will achieve the objectives.

An integral consideration in program budgeting is to identify criteria which can measure program effectiveness: this, in final analysis,

must be the ultimate goal. However, this aspect of systems management or any management theory employed by educational organizations has been perhaps the most elusive component to achieve.

At present, school districts rely primarily on standardized tests for measuring student performance. These tests, however, do not measure those areas of the total educational process which deal with creativity, for example.

Some progress has been made recently in evaluative development with the advent of SPPED (Systems for Pupil, Program, Evaluation, and Development). This is an overall instructional management system designed to be used as a resource for local program development and evaluation. It consists of two parts; BOIR (Bank of Objectives, Items, and Resources) which local planners can use in designing curriculum and CAM (Comprehensive Achievement Monitoring) which uses computer generated and scored test materials to monitor achievement on both an individual and group basis. Continued research along these lines augur well for the future.

Continuing with the Phase II illustration, let us assume that districtwide goals have been defined and objectives for each program identified. This data would be added to the information generated in the procedures outlined above (budget guidelines, estimated enrollment, budget recast, etc.). The information so gathered would then be distributed to the building principals, assuming that the program structure developed in the first model would be maintained. On the basis of this data each building principal in connection with other concerned staff would then develop a program budget for his building (location).

Figure 9 indicates how program budget requests may be accumulated for presentation to central administration and board for review and evaluation.

The illustration, of course, does not show the amount of effort required in the process and/or the responsibility of each individual or office to complete its assignment leading to the completed program budget.

A careful review of figure 10 reveals that the program structure follows the Phase I illustration in that each location (building) will be a general program, subdivided into programs (grade level) and sub-programs (subject area within grade level).

Each alternative program request will indicate the objectives to be served, plan for achievement of the identified objectives, evaluative criteria which will assist in determining effectiveness, the resources required to support the proposal, and finally an estimated projection of costs for the subsequent years of implementation.

The needed resources are separated into four main categories; staff, equipment, materials and supplies, and contractual and other services. These categories are consistent with the proposal made in Phase I.

Some program requests may have only one alternative; this, of course, is dependent on local decision. It is conceivable that there may be as many individual requests as sub-programs (subject area) offered within each grade level.

Once the requests have been completed and tentatively approved by grade level, they would then be collated to form the program budget request for each building (location).

Information needed by central administration or the board concerning sub-program requests could be obtained by a review of that particular request which would be a supporting document in the total building program budget request. This may be more clearly seen in the figure 9 illustration.

A casual assessment of this procedure would indicate that it is a laborious process. However, this may not be so in many situations, since school districts presently employing cooperative budgeting procedures follow such practice. It is conceded that greater articulation is necessary between principal and school staff, principal and resource staff, and principal and central administration to assure success.

Each completed location budget request would then be sent to central administration for review and evaluation prior to submission to the board for final approval. A suggested approach at this level of development would be to form a working committee which would include all principals of smaller school systems or representative ones in larger systems, representative classroom teachers, resource staff, directors and central office staff to review each building request. It is important to keep in mind that the size of this committee should be kept as small as possible in order to expedite completion of the task.

The primary concern of this committee would be to review the program budget requests in respect to articulation of total program K-12, objectives to be achieved, and to ensure that budgetary guidelines have been adhered to.

Following the completion of this task, the tentatively approved building program requests would be reviewed by the board for final

decision. Each individual responsible for development of program requests would be required if necessary to explain and justify them at this stage.

The accepted budget could then be presented to the voters in program format as the popular budget. At this point it would also be necessary to recast it in a function/object format for state reporting purposes.

SUMMARY PHASE II

The procedures outlined in numbers 1 through 4 above are summarized as follows:

1. Identify all programs that can be viewed as being discrete.
   a. Various options are available, the suggested method is to use location as general program, grade level as program, and subject area as sub-program within each grade level.
   b. Only instructional function items plus fringe benefits where applicable would be assigned to each location.
2. Develop a coding system.
   a. The suggested coding system would incorporate the following:

      Function Object Program Sub-Program Location
3. Establish budget guidelines.
   a. Complete an evaluation of available resources.
   b. Determine what constraints are in effect.
4. Estimate numbers of students to be served in each program.

5. Recast the function object budget for comparison purposes.
    a. Recast the current year function object budget into identified program allocations for comparison with proposed program budget for the ensuing year. This is a one-time task.
6. Develop the program budget.
    a. Complete the planning activity to determine goals of the district and objectives to meet these goals for each identified program.
    b. Develop program alternatives to achieve the desired objectives within the constraints in effect.
    c. Determine evaluative criteria for each identified program to assess achievement.
7. Present program budget.
    a. Present the budget requests in programmatic form to board.
    b. Recast the tentative program budget into function and object form for state purpose reporting.
    c. Present the program budget to the voters for approval.

Particular attention is directed to item 6 since it is the core of the entire process. All other aspects of developing a program budget should be supportive of this activity. If the PB implementation is to be a viable one, educators must make the most significant contributions. In far too many instances program budgets have not gone beyond the costing stage because the instructional staff did not support or participate in the required activities. The management value of a PB is not generated by the mere costing of programs; its main contribution to this end lies

in the systematic procedures involved in program identification, planning for future educational achievement, designing programs to obtain the stated objectives, and developing evaluative criteria to assess progress.

It is for these reasons that the chief school officer, once given approval by the board to initiate a PB, must be the prime mover behind implementation.

Another highly important feature of program budgeting is the long-term view of program development and the costs associated with them which can be more readily gathered in a systems approach than in a traditional budgeting process. The greater precision necessary for program identification in PB makes this possible.

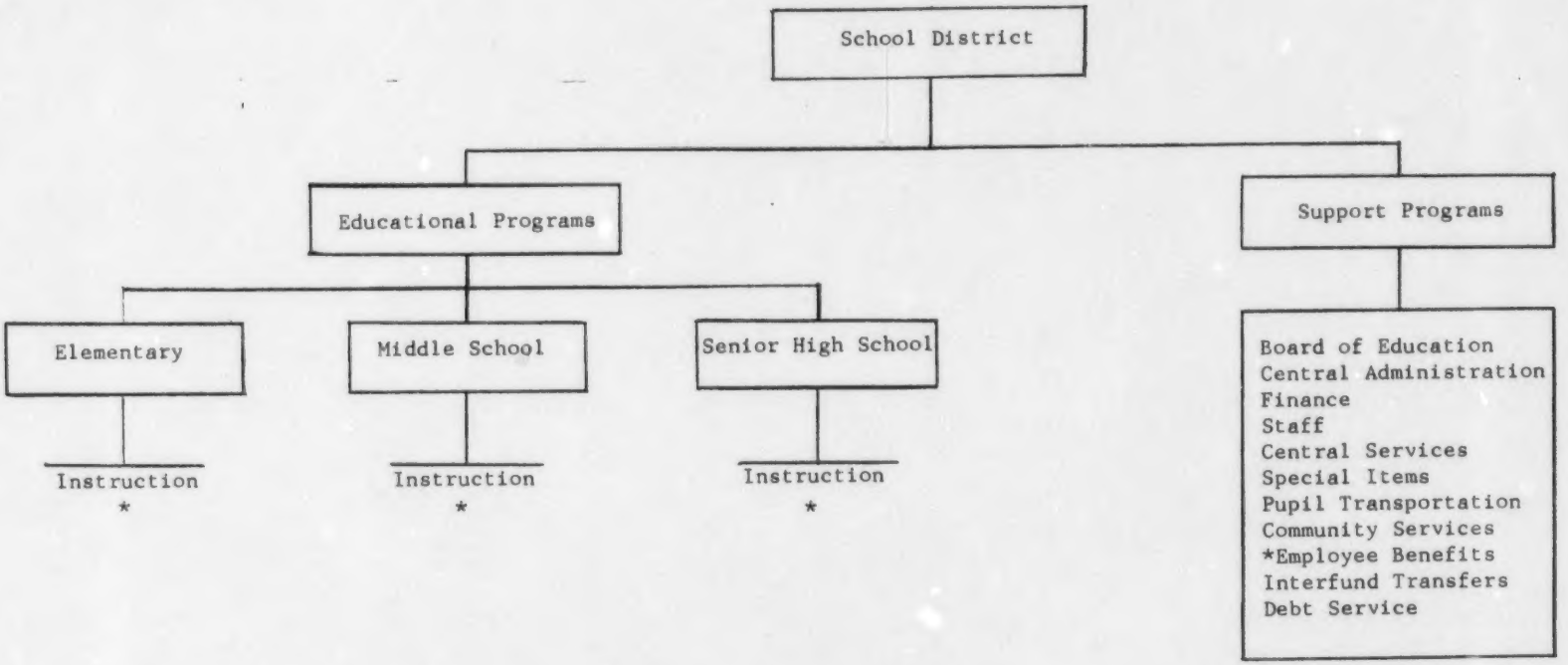
Continued experience with a program budget may indicate that a restructuring of line and staff organization is needed to assign responsibility for cyclical events in a more effective manner.

The procedural guidelines established in Phases I and II are not presumed to be all inclusive since they cannot fully be applied to all of the unique considerations of the various school districts. They cannot include the multitude of administrative and mechanical considerations necessary for implementation. However, it is hoped that what has been stated will clarify some conceptions of PB advanced elsewhere and perhaps establish a general direction to be followed by those contemplating implementation.

Figure 1

Typical Program Structure Based On

Building Location



*Fringe Benefits Assigned to Location

Figure 2

Optional Coding System

Function / Object	Program	Sub-Program	Location
Use function-object coding found in Uniform System of Accounts Double Entry Basis Manual--Optional function and object coding found in the manual may be used for a more comprehensive allocation of appropriations and/or expense.	00 to 99 If program offerings and/or other desired program categories exceed 99 units, coding may be expanded to three digits.	01 to 99 If subject offerings and/or other desired sub-program categories exceed 99 units, coding may be expanded to three digits.	01 to 99 Where units exceed 99, this coding may be expanded to three digits.

Representative Samples of How Coding May Be Assigned

Program	Sub-Program	Location
00-Kindergarten 01-Grade One 02-Grade Two 03-Grade Three 04-Grade Four 05-Grade Five 06-Grade Six 07-Grade Seven 08-Grade Eight 09-Grade Nine 10-Grade Ten 11-Grade Eleven 12-Grade Twelve and so on.	01-Reading 02-Lang.Arts 03-Math 04-Social Studies 05-Foreign Lang. 06-Science 07-Art 08-Health 09-Business 10-Home Ec. 11-Ind. Arts 12-Music 13-Driver Ed. 14-Phys. Ed. and so on.	01-Elem.School A 02-Elem.School B 03-Elem.School C 04-Middle School 05-Senior High School 06-Central Office

PROGRAM DATA

School A (01) Location | 01 Program (Grade) | Budget Year

Figure 3 ELEMENTARY — Allocation of Instructional Time to Sub-Programs (Subject Area) — Professional

Name	PERCENTAGE OF TIME ALLOCATED TO EACH SUBJECT									NOTES
	Reading	Lang. Arts	Math.	Social Studies	Science	Art	Music	Phys. Ed.		
Smith, Mary	.50	.20	.10	.05	.05		.05	.05		
Steele, Kay	.50	.20	.10	.05	.05		.05	.05		
Brown, Harriet	.50	.20	.10	.05	.05		.05	.05		
Morgan, Edward								.10		Central Office
Kerrigan, M. J.						.05				Central Office
Borst, Susan							.05			Central Office

Figure 4 School A (01) Location 01 Program (Grade) PROGRAM DATA Budget Year

ELEMENTARY (Grades K-6) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Smith, Mary	Reading - (01)	.50	12,500	6,250	2110-12-01-01-01
Steele, Kay	Reading	.50	13,000	6,500	2110-12-01-01-01
Brown, Harriet	Reading	.50	8,500	4,250	2110-12-01-01-01
*Completed by Business Office			Total	17,000	2110-12-01-01-01

Figure 4a School A (01) Location 01 Program (Grade) PROGRAM DATA Budget Year

ELEMENTARY (Grades K-6) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Evart, Minnie	Reading - (01)	.75	5,200	3,900	2110-16-01-01-01
*Completed by Business Office			Total	3,900	2110-16-01-01-01

Figure 4b School A (01) Location 01 Program (Grade) PROGRAM DATA Budget Year

ELEMENTARY (Grades K-6) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Smith, Mary	Language Arts (02)	.20	12,500	2,500	2110-12-01-02-01
Steele, Kay	Language Arts	.20	13,000	2,600	2110-12-01-02-01
Brown, Harriet	Language Arts	.20	8,500	1,700	2110-12-01-02-01

Figure 4c School A (01) Location 01 Program (Grade) PROGRAM DATA Budget Year

ELEMENTARY (Grades K-6) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Smith, Mary	Mathematics (03)	.10	12,500	1,250	2110-12-01-03-01
Steele, Kay	Mathematics	.10	13,000	1,300	2110-12-01-03-01
Brown, Harriet	Mathematics	.10	8,500	850	2110-12-01-03-01
*Completed by the	Business Office		Total	3,400	2110-12-01-03-01

Figure 4d School A (01) Location 01 Program (Grade) PROGRAM DATA Budget Year

ELEMENTARY (Grades K-6) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Smith, Mary	Social Studies (04)	.05	12,500	625	2110-12-01-04-01
Steele, Kay	Social Studies	.05	13,000	650	2110-12-01-04-01
Brown, Harriet	Social Studies	.05	8,500	425	2110-12-01-04-01
*Completed by Business Office			Total	1,700	2110-12-01-04-01

Figure 4e School A (01) Location 01 Program (Grade) PROGRAM DATA Budget Year

ELEMENTARY (Grades K-6) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Smith, Mary	Science (06)	.05	12,500	625	2110-12-01-06-01
Steele, Kay	Science (06)	.05	13,000	650	2110-12-01-06-01
Brown, Harriet	Science (06)	.05	8,500	425	2110-12-01-06-01
*Completed by Business Office			Total	1,700	2110-12-01-06-01

Figure 4f School A (01) Location 01 Program (Grade) PROGRAM DATA Budget Year

ELEMENTARY (Grades K-6) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Kerigan, M. J.	Art (07)	.05	12,500	625	2110-12-01-07-01
*Completed by Business Office			Total	625	2110-12-01-07-01

Figure 4g School A (01) Location 01 Program (Grade) PROGRAM DATA Budget Year

ELEMENTARY (Grades K-6) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Smith, Mary	Music (12)	.05	12,500	625	2110-12-01-12-01
Steele, Kay	Music	.05	13,000	650	2110-12-01-12-01
Brown, Harriet	Music	.05	8,500	425	2110-12-01-12-01
Borst, Susan	Music	.05	8,500	425	2110-12-01-12-01
*Completed by Business Office			Total	2,125	2110-12-01-12-01

Figure 4h School A (01) Location 01 Program (Grade) PROGRAM DATA Budget Year

ELEMENTARY (Grades K-6) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Smith, Mary	Physical Education (14)	.05	12,500	625	2110-12-01-14-01
Steele, Kay	Physical Education	.05	13,000	650	2110-12-01-14-01
Brown, Harriet	Physical Education	.05	8,500	425	2110-12-01-14-01
Morgan, Edward	Physical Education	.10	12,500	1,250	2110-12-01-14-01
*Completed by Business Office			Total	2,950	2110-12-01-14-01

Figure 4i School E (05) Location 10 Program (Grade) PROGRAM DATA Budget Year

SECONDARY (Grades 7-12) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Wilkins, Harold	Social Studies (04)	.50	14,200	7,100	2110-13-10-04-05
Maitland, Doris	Social Studies	.30	13,500	4,050	2110-13-10-04-05
Burg, Morton	Social Studies	.20	10,800	2,160	2110-13-10-04-05
Hart, Francis	Social Studies	.20	14,500	2,900	2110-13-10-04-05
*Completed by Business Office			Total	16,210	2110-13-10-04-05

Figure 4j School E (05) Location 11 Program (Grade) PROGRAM DATA Budget Year

SECONDARY (Grades 7-12) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Wilkins, Harold	Social Studies (04)	.50	14,200	7,100	2110-13-11-04-05
Maitland, Doris	Social Studies	.70	13,500	9,450	2110-13-11-04-05
Burg, Morton	Social Studies	.30	10,800	3,240	2110-13-11-04-05
Hart, Francis	Social Studies	.20	14,500	2,900	2110-13-11-04-05
*Completed by Business Office			Total	22,690	2110-13-11-04-05

Figure 4k School E (05) Location 12 Program (Grade) PROGRAM DATA Budget Year

SECONDARY (Grades 7-12) Allocation of Salaries to Sub-Program (Subject Area) Professional

Name	Sub-Program (Subject Area)	% of Time Allocated	*Gross Salary	*Salary Allocation to Sub-Program	*Program Budget Code
Wilkins, Harold	Social Studies (04)	.00	14,200	.00	2110-13-12-04-05
Maitland, Doris	Social Studies	.00	13,500	.00	2110-13-12-04-05
Burg, Morton	Social Studies	.50	10,800	5,400	2110-13-12-04-05
Hart, Francis	Social Studies	.60	14,500	8,700	2110-13-12-04-05
*Completed by Business Office			Total	14,100	2110-13-12-04-05

Figure 5 Location PROGRAM DATA Budget Year

Program (Grade) Allocation of Instructional Appropriations to Location by Grade Level

Instruction	197 -7 Current Year	197 -7 Budget Year Estimate	197 -7 Estimate	197 -7 Estimate	Program Budget Code
A2010 CURRICULUM DEVELOPMENT AND SUPERVISION					
2010.15 Instructional Salaries					
2010.16 Non-Instructional Salaries					
2010.2 Equipment					
2010.4 Contractual Expense					
2010.(4)5 Materials and Supplies					
2010.49 BOCES Services					
2010.0 Total					
A2020 SUPERVISION - REGULAR SCHOOLS					
2020.15 Instructional Salaries					
2020.16 Non-Instructional Salaries					
2020.2 Equipment					
2020.4 Contractual Expense					
2020.(4)5 Materials and Supplies					
2020.0 Total					
A2060 RESEARCH PLANNING AND EVALUATION					
2060.15 Instructional Salaries					
2060.16 Non-Instructional Salaries					
2060.2 Equipment					
2060.4 Contractual Expense					
2060.(4)5 Materials and Supplies					
2060.49 BOCES Services					
2060.0 Total					

Figure 5a	Location Program (Grade)	PROGRAM DATA Allocation of Instructional Appropriations to Location by Grade Level			Budget Year
Instruction	197 -7 Current Year	197 -7 Budget Year Estimate	197 -7 Estimate	197 -7 Estimate	Program Budget Code
A2070 INSERVICE TRAINING - INSTRUCTION					
2070.15 Instructional Salaries					
2070.16 Non-Instructional Salaries					
2070.2 Equipment					
2070.4 Contractual Expense					
2070.(4)5 Materials and Supplies					
2070.49 BOCES Services					
2070.0 Total					
A2110 TEACHING - REGULAR SCHOOL					
2110.10 Teachers Salaries, Pre-K					
2110.11 Teachers Salaries, ½ Day K					
2110.12 Teachers Salaries, K-6					
2110.13 Teachers Salaries, 7-12					
2110.14 Substitute Teachers Salaries					
2110.16 Non-Instructional Salaries					
2110.2 Equipment					
2110.4 Contractual Expense					
2110.41 Tuition					
2110.(4)5 Materials and Supplies					
2110.48 Textbooks					
2110.49 BOCES Services					
2110.0 Total					

Figure 5b	Location	PROGRAM DATA			Budget Year
	Program (Grade)	Allocation of Instructional Appropriations to Location by Grade Level			
Instruction	197 -7 Current Year	197 -7 Budget Year Estimate	197 -7 Estimate	197 -7 Estimate	Program Budget Code
A2610 SCHOOL LIBRARY AND AUDIO VISUAL					
2610.15 Instructional Salaries					
2610.16 Non-Instructional Salaries					
2610.2 Equipment					
2610.4 Contractual Expense					
2610.(4)5 Materials and Supplies					
2610.49 BOCES Services					
2610.0 Total					
A2620 EDUCATIONAL TELEVISION					
2620.15 Instructional Salaries					
2620.16 Non-Instructional Salaries					
2620.2 Equipment					
2620.4 Contractual Expense					
2620.(4)5 Materials and Supplies					
2620.49 BOCES Services					
2610.0 Total					
A2630 COMPUTER ASSISTED INSTRUCTION					
2630.15 Instructional Salaries					
2630.16 Non-Instructional Salaries					
2630.2 Equipment					
2630.4 Contractual Expense					
2630.(4)5 Materials and Supplies					
2630.49 BOCES Services					
2630.0 Total					

Figure 5c	Location Program (Grade)	PROGRAM DATA Allocation of Instructional Appropriations to Location by Grade Level		Budget Year	
Instruction	197 -7 Current Year	197 -7 Budget Year Estimate	197 -7 Estimate	197 -7 Estimate	Program Budget Code
A2805 ATTENDANCE - REGULAR SCHOOL					
2805.15 Instructional Salaries					
2805.16 Non-Instructional Salaries					
2805.2 Equipment					
2805.4 Contractual Expense					
2805.(4)5 Materials and Supplies					
2805.49 BOCES Services					
2805.0 Total					
A2810 GUIDANCE - REGULAR SCHOOL					
2810.15 Instructional Salaries					
2810.16 Non-Instructional Salaries					
2810.2 Equipment					
2810.4 Contractual Expense					
2810.(4)5 Materials and Supplies					
2810.49 BOCES Services					
2810.0 Total					
A2815 HEALTH SERVICES - REGULAR SCHOOL					
2815.15 Instructional Salaries					
2815.16 Non-Instructional Salaries					
2815.2 Equipment					
2815.4 Contractual Expense					
2815.(4)5 Materials and Supplies					
2815.49 BOCES Services					
2815.0 Total					

Figure 5d	Location	PROGRAM DATA			Budget Year
	Program (Grade)	Allocation of Instructional Appropriations to Location by Grade Level			
Instruction	197 -7 Current Year	197 -7 Budget Year Estimate	197 -7 Estimate	197 -7 Estimate	Program Budget Code
A2820 PSYCHOLOGICAL SERVICES - REGULAR SCHOOL					
2820.15 Instructional Salaries					
2820.16 Non-Instructional Salaries					
2820.2 Equipment					
2820.4 Contractual Expense					
2820.(4)5 Materials and Supplies					
2820.49 BOCES Services					
2820.0 Total					
A2825 SOCIAL WORK SERVICES - REGULAR SCHOOL					
2825.15 Instructional Salaries					
2825.16 Non-Instructional Salaries					
2825.2 Equipment					
2825.4 Contractual Expense					
2825.(4)5 Materials and Supplies					
2825.49 BOCES Services					
2825.0 Total					
A2850 CO-CURRICULAR ACTIVITIES - REG. SCHOOL					
2850.15 Instructional Salaries					
2850.16 Non-Instructional Salaries					
2850.2 Equipment					
2850.4 Contractual Expense					
2850.(4)5 Materials and Supplies					
2850.0 Total					

Figure 5e	Location	PROGRAM DATA			Budget Year
	Program (Grade)	Allocation of Instructional Appropriations to Location by Grade Level			
Instruction	197 -7 Current Year	197 -7 Budget Year Estimate	197 -7 Estimate	197 -7 Estimate	Program Budget Code
A2855 INTERSCHOLASTIC ATHLETICS - REG. SCHOOL					
2855.15 Instructional Salaries					
2855.16 Non-Instructional Salaries					
2855.2 Equipment					
2855.4 Contractual Expense					
2855.(4)5 Materials and Supplies					
2855.49 BOCES Services					
2855.0 Total					

Figure 6

Location

Program (Grade)

PROGRAM DATA

Budget Year

Allocation of Fringe Benefits to Location by Grade Level

Fringe Benefits	197 -7 Current Year	197 -7 Budget Year Estimate	197 -7 Estimate	197 -7 Estimate	Program Budget Code
A9010 Employee Benefits					
9010.8 State Retirement					
9020.8 Teacher Retirement					
9030.8 Social Security					
9040.8 Workmens Compensation					
9045.8 Life Insurance					
9050.8 Unemployment Insurance					
9055.8 Disability Insurance					
9060.8 Hospital and Medical Benefits					
9070.8 Union Welfare Benefits					
9089.8 Other					
9099.0 Total					

Figure 7

Sample Program Cost Allocation Based on Phase I Implementation

LEVEL I -- Total District Appropriation for School Year

LEVEL II -- Program Cost Based on Location

Elementary Schools	*Salaries and Fringe Benefits	Equipment	Supplies and Materials	Contractual and Other Expenses	Total
School A	$250,000	$10,000	$25,000	$1,000	$ 286,000
School B	275,000	15,000	30,000	1,500	321,500
School C	225,000	5,000	23,000	1,200	254,200
	750,000	30,000	78,000	3,700	861,700
Middle School					
School D	750,000	30,000	35,000	5,000	820,000
Senior High School					
School E	805,000	35,000	40,000	7,000	887,000
Column Total	$2,305,000	$95,000	$153,000	$15,700	$2,568,700

*Salaries and fringe benefits may be presented in separate columns to portray allocations for each or salaries alone may be presented.

Support Programs	
Board of Education	31,300
Central Administration	240,000
Instruction-Special Schools	60,000
Community Services	10,000
Transportation	250,000
Operation and Maintenance	600,000
Undistributed Expenses	500,000
Debt Service	480,000
Interfund Transfers	50,000
Total	$2,221,300
Total Appropriation	$4,790,000

Figure 7 (Cont'd.)

LEVEL III

Elem. School	Program	*Sub-Program		Salaries and Fringe Benefits	Equipment	Supplies and Materials	Contractual and other Expenses	Total by Grade	# of Children Served	Cost per Child
School A	Grade K	Optional See Below		25,000	2,000	3,000	100	30,100	50	$602
	Grade 1			40,000	1,000	4,000	100	45,100	80	564
	Grade 2			48,000	1,500	3,000	200	52,700	85	620
	Grade 3			47,000	1,000	5,000	200	53,200	90	591
	Grade 4			42,000	2,000	5,000	200	49,200	80	615
	Grade 5		Total	48,000	2,500	5,000	200	55,700	85	655
			School	250,000	10,000	25,000	1,000	286,000	470	609
School B	Grade K			31,500	5,000	5,000	--	41,500	70	593
	Grade 1			45,000	2,000	3,000	1,000	51,000	85	600
	Grade 2			47,500	1,000	5,000	500	54,000	90	600
	Grade 3			48,100	3,000	4,000	500	55,600	95	585
	Grade 4			49,400	2,000	6,000	2,000	59,400	90	660
	Grade 5		Total	50,000	2,000	6,000	2,000	60,000	90	667
			School	271,500	15,000	29,000	6,000	321,500	520	618
School C	Grade K			15,000	3,000	3,200	--	21,200	35	606
	Grade 1			42,000	2,000	3,500	--	47,500	75	633
	Grade 2			42,000	3,000	4,500	--	49,500	79	627
	Grade 3			43,000	500	2,000	--	45,500	80	569
	Grade 4			40,000	2,500	3,000	--	45,500	81	562
	Grade 5		Total	38,000	4,000	3,000	--	45,000	83	542
			School	220,000	15,000	19,200	--	254,200	433	587
							Total elementary	861,700	1,423	
								Average cost per child elementary		606

*This budget presentation does not show sub-program (subject area) costs by grade level. However, the program coding system illustrated will allow presentation of appropriation by both grade level and subject area for grade level.

Figure 7 (Cont'd.)

LEVEL III-Continued

Middle School	Program	*Sub-Program	Salaries and Fringe Benefits	Equipment	Supplies and Materials	Contractual and other Expenses	Total by Grade	# of Children Served	Cost per Child
School D	Grade 6	*Optional	115,000	10,000	20,000	5,000	150,000	250	$600
	**Grades 7&8								
		English	75,000	1,000	5,000	--	81,000	500	162
		Language	22,000	5,000	5,000	--	32,000	250	128
		Mathematics	25,000	1,000	10,000	--	36,000	250	144
		Science	68,000	10,000	20,000	5,000	103,000	500	206
		Soc. Studies	72,000	1,000	10,000	5,000	88,000	500	176
		Art	26,000	5,000	15,000	--	46,000	250	184
		Health	19,000	1,000	5,000	1,000	26,000	250	104
		Business	24,000	5,000	10,000	3,000	42,000	250	168
		Home Ec.	28,000	10,000	20,000	6,000	64,000	250	256
		Ind. Arts	27,000	15,000	10,000	--	52,000	250	208
		Music	32,000	2,000	5,000	4,000	43,000	500	86
		Phys. Ed.	27,000	15,000	10,000	5,000	57,000	250	228
		Total by School	445,000	71,000	125,000	29,000	670,000	4,000	
							Average cost per child per sub-program grades 7&8		168
Senior High School									
School E	**Grades 9,10,11,12								
		English	100,000	2,000	5,000	1,000	108,000	750	144
		Language	30,000	5,000	2,000	--	37,000	300	123
		Mathematics	98,000	1,000	6,000	--	105,000	720	146
		Science	63,000	15,000	10,000	--	88,000	500	176
		Soc. Studies	95,000	1,000	5,000	1,000	102,000	710	144
		Art	35,000	2,000	10,000	--	47,000	210	224
		Health	43,000	1,000	1,000	--	45,000	350	129
		Business	44,000	20,000	5,000	2,000	71,000	325	218
		Home Ec.	32,000	20,000	10,000	2,000	64,000	205	312
		Ind. Arts	46,000	15,000	10,000	--	71,000	225	316
		Music	28,000	1,000	2,000	--	31,000	105	295
		Driver Ed.	36,000	1,000	1,000	5,000	43,000	120	358
		Phys. Ed.	52,000	15,000	5,000	3,000	75,000	500	150
		Total High School	702,000	99,000	72,000	14,000	887,000	5,020	
							Average cost per child per sub-program		177

**Using the coding system indicated will allow the district various options for its presentation in the popular budget as exemplified above. However, it is suggested that both grade (program) and subject area by grade (sub-program) be accounted for in the working budget.

Figure 8

Time Line of Activities Required to Complete a Program Budget Cycle

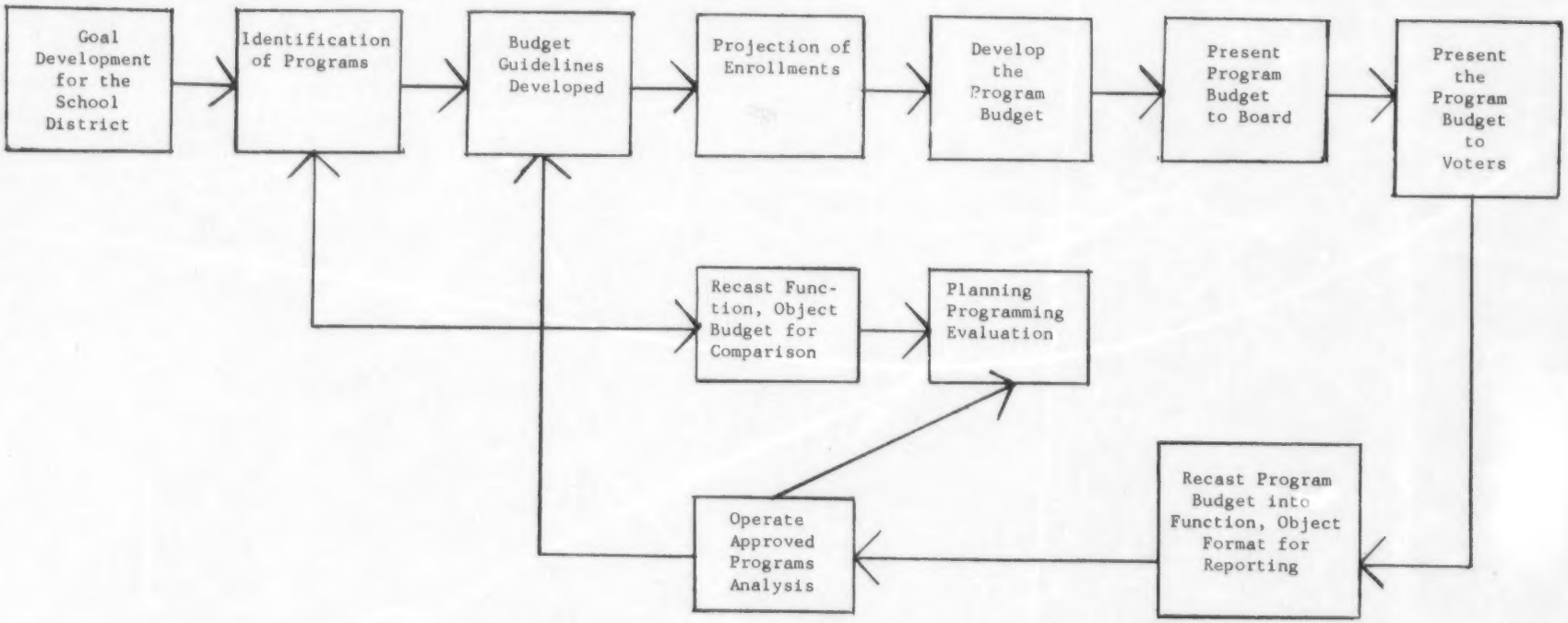

Goal Development for the School District
Identification of Programs
Budget Guidelines Developed
Projection of Enrollments
Develop the Program Budget
Present Program Budget to Board
Present the Program Budget to Voters
Recast Function, Object Budget for Comparison
Planning Programming Evaluation
Recast Program Budget into Function, Object Format for Reporting
Operate Approved Programs Analysis

Figure 9

Program Request

Program Location: Elementary School A Budget Year _____

Program: Grade One

Sub-Program: Reading Alternative Number: One

Objectives:

1. At the completion of the school year at least 60 percent of the pupils will be reading at or above grade level.
2. Individual reading deficiencies will be identified and corrective measures implemented.

Number of Children Served: 80

Plan for Achievement of Objectives:

1. Inservice training program to help teachers diagnose students with visual and/or perceptual problems.
2. Coordination with the school nurse-teacher for medical information.
3. Individual testing program by the school psychologist.
4. Individual home visits by the school social worker or, if unavailable, the psychologist.
5. Classroom observations by the psychologist, social worker, reading specialist.
6. Team conference by all of the above with the classroom teacher to prescribe an individual program for the student.
7. Parents, teacher, administrator conference for information purposes.

Evaluative Criteria to be Used:

1. Informal reading inventory.
2. Individual intelligence test.
3. Diagnostic reading test.
4. Visual-motor perceptual test.
5. Eye examination.
6. Auditory discrimination examination.

Figure 9 (Cont'd.)

Equipment:

Telebinocular	Cassettes and recorders	Filmstrip projectors
Audiometer	Language masters	Film projectors

Supplies and Materials:

Testing materials
Basal readers (variety)
Pre-primers through second grade (2.2)
Trade books (variety)
Picture books through second grade (2.2)
Filmstrips
Manipulative Materials-i.e.
  Art supplies (paper, paint, crayons, etc.)
  Modeling clay
Films
Interest centers-i.e.
  Science (aquarium, science kit for simple experiments, etc.)
  Math (peg boards, flannel boards, abacus, cuisenaire rods, etc.)

Resources Required

Staff	Percent of Time to Sub-Program	Gross Salary	Salary Allocation to Sub-Program
Teacher A	.50	$14,000	$ 7,000
Teacher B	.50	12,000	6,000
Teacher C	.50	10,000	5,000
Psychologist	.10	18,000	1,800
Reading Specialist	.10	16,500	1,650
Paraprofessional	1.00	5,200	5,200
		Total	$26,650

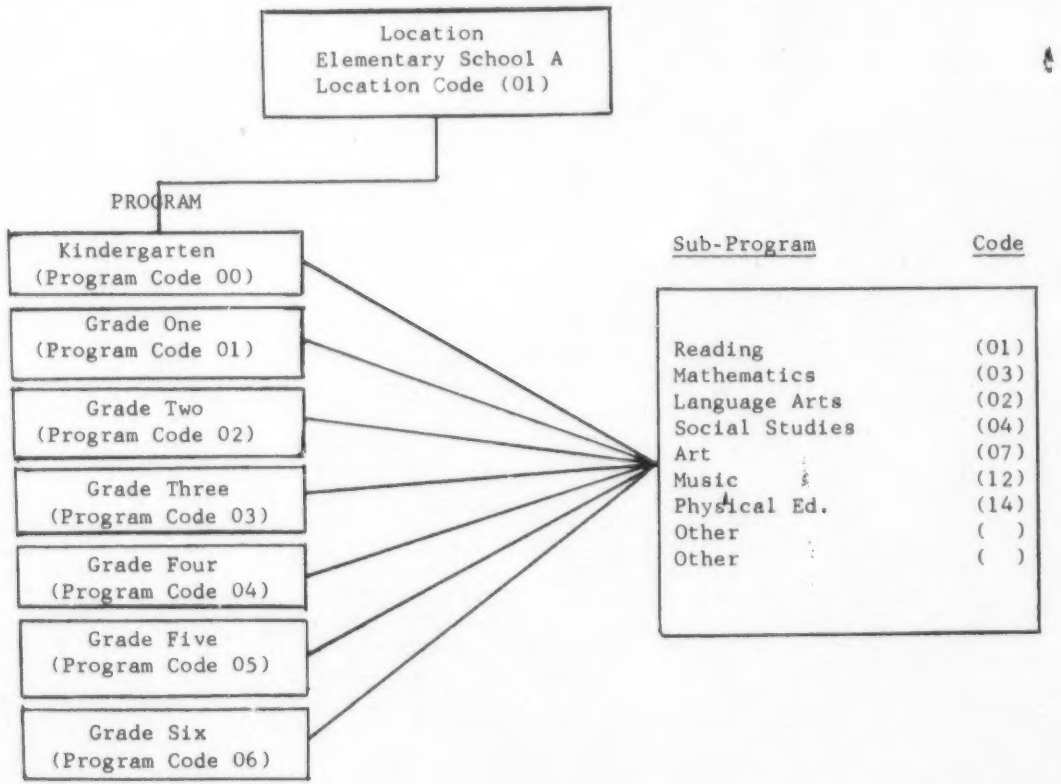
Equipment	2,500
Supplies and Materials	8,000
Contractual and other Services	100
Total-Sub-Program	$37,250
Cost per Child Served	466

Projected Long Range Costs of Alternative One

Year	197 -197	197 -197	197 -197	197 -197	197 -197
Estimated Cost					
Cost Per Child					

Figure 10

Illustration of a Structure for Program Coding



A suggested Phase I identification of costs attributable to programs would be to identify only direct salary costs to sub-programs (subject area), but salary, related fringe benefits, supplies and materials, equipment, contractual and other expense, and all other applicable instructional items to program (grade level). In the development of alternatives for sub-programs (subject area) in Phase II, it is suggested that salary, supplies and materials, equipment, and contractual and other expense be identified for each sub-program request. All approved sub-program requests would be collated by grade level, added to the other instruction item functions and fringe benefits applicable to that grade level and become the program total for the grade.

APPENDIX A

Selected Bibliography

The Analysis and Evaluation of Public Expenditures: The PPB System. Washington, D.C.: United States Congress, Joint Economic Committee, Subcommittee on Economy in Government. 1969.

Andrew, Gary M., and Moir, Ronald E. Information-Decision-Systems in Education. Itasca, Illinois: Peacock. 1970.

Bushnell, David S., and Rapport, Donald. Planned Change in Education, a System Approach. New York: Harcourt. 1971.

Erie County BOCES. An Operational Model for the Application of Planning-Programming-Budgeting Systems to Local School Districts. Buffalo, New York: 1972.

George Washington University. State-Local Finances Project. Planning for Educational Development in a Planning, Programming, Budgeting System. Washington, D.C.: 1968.

Haggart, Sue A. (ed.). Program Budgeting for School District Planning. Englewood Cliffs, New Jersey: Educational Technology Publications. 1972.

Hartley, Harry J. Educational Planning-Programming-Budgeting, a Systems Approach. Englewood Cliffs, New Jersey: Prentice-Hall. 1968.

Hirsch, Werner Z. Education in the Program Budget. Santa Monica, California: Rand Corporation. 1965.

Koerner, Thomas F. PPBS and the School: New System Promotes Efficiency-Accountability. Washington, D.C.: National School Public Relations Association. 1972.

McGivney, Joseph H., and Hedges, Robert E. Introduction to PPBS. Columbus, Ohio: Merrill. 1972.

National Conference on PPBES in Education, 1st, Denver. Report. Association of School Business Officials Research Corporation. Chicago: 1969.

National School Public Relations Association. PPBS and the School. Washington, D.C.: 1972.

Novick, David. The Origin and History of Program Budgeting. Santa Monica, California: Rand Corporation. 1966.

School Business Management Handbooks. Budget No. 3. Albany, New York: State Education Department. 1968.

Smithies, Arthur. The Budgetary Process in the United States. New York: McGraw-Hill. 1955.